



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 10**  
1200 Sixth Avenue  
Seattle, Washington 98101

September 5, 2002

Reply To  
Attn Of: ECL-113

Commander, Ft. Lewis  
Directorate of Public Works  
ATTN: AFZH-DEQ MS 17 (Mr. Eric Waehling)  
Building 2012, Room 323  
Ft. Lewis, WA 98433-9500

*(sent via e-mail and regular mail)*

**Subject:** Management Plan Addendum, Landfill 4, dated May 3, 2002

Dear Eric:

Please find EPA's comments on the subject modification enclosed. Let me know if you have any questions or concerns at (206) 553-1220. Please also feel free to discuss these comments with GF directly such that these concerns can be resolved with no delay to the field effort.

Sincerely,

Sean Sheldrake, Project Manager

Enclosure

cc: Rodney Taie, USACE  
Chris Maurer, Ecology  
Ben Forson, Ecology

## **MEMORANDUM**

**TO:** Sean Sheldrake, EPA WAM

**FROM:** John Roland, PG

**SUBJECT:** Review of Draft Management Plan Addendum: Modification Number 7 to

DO 0035 Landfill 4/demolition Area 1 Expanded Site Inspection,  
Camp Bonneville, Washington dated August 2002.

**DATE:** August 30, 2002

**Section 1.2, Page 2, Fourth Paragraph.** The description provided of the direct push soil sampling technique does not mention whether the sampling tube will be the type that can be sealed and remotely opened at sampling depths deeper than the initial 30 inches below ground surface (bgs). In the opinion of Gannett Fleming a sampling tube that can be opened at the intended sampling depth is preferable to one that remains open. Soils sample depths are more accurate using a remotely opening tube and there is less slough from uphole and sidewalls included with the undisturbed soil. If the drilling contractor has or can procure this type of sampling tool it should be used to collect the soil samples.

**Section 1.2, Page 3, First Paragraph.** The description of the surface completion of the 0.75-inch-diameter well does not provide any description of a surface casing for protection. Gannett Fleming recommends, at a minimum, the installation of a piece of 2-inch-diameter PVC surface casing be cemented in place through the surface pad and a cap to protect the well casing above ground level.

**Section 1.2, Page 3, Last Paragraph.** The text should mention any other soil characteristics or indicators, in addition to observing saturation, that will be considered in evaluating whether or not to construct a shallow well at location L4-MW07B.

**Section 3.0, Page 5, Last paragraph.** The description of the water level measurement interval provided in the text states that the data will be collected every 30 seconds for the duration of the test. In the opinion of Gannett Fleming while this interval is appropriate for most of the test, an initial interval of 5 seconds should be used for pretest and t2= to 5.0 minutes readings. This will provide additional data

during the critical portion of the test for dramatic water level elevation change and provide a better graph for curve matching.

**Section 5.0, Page 6, First Paragraph.** The text states that meteorologic data will be collected from a nearby airport such as Portland International. Historic data may have to come from this location but, in the opinion of Gannett Fleming, local readings at Camp Bonneville should also be recorded and compared to the airport's measurements to assess the comparability of the meteorological data.

